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BY ELECTRONIC MAIL AND U.S. MAIL

Daniel L. Isales, Esq.
Assistant Regional Counsel
U.S. Environmental Protection Agency
Region III
Environmental Sciences Center
701 Mapes Road
Fort Meade, Maryland 20755-5350

RE: Alliant Techsystems Operations LLC
Radford Army Ammunition Plant
Radford, Virginia

Dear Mr. Isales:

I am responding on behalf of Alliant Techsystems Operations LLC ("Alliant Techsystems" or "the Company") to the Invitation to Settlement letter dated January 26, 2015, that Samantha Beers of EPA Region III sent to Mr. Michael Miano of Alliant Techsystems and to Lt. Col. Luis Ortiz, Commander of the Radford Army Ammunition Plant ("RFAAP"). In that letter EPA expressed concerns arising out of the Agency's environmental compliance inspections of RFAAP conducted in May 2011 and February 2014. EPA invited the U.S. Army and Alliant Techsystems to discuss those concerns with the Agency with the goal of negotiating a settlement of a potential enforcement action by EPA against the Army and Alliant Techsystems.

Alliant Techsystems believes it is critical that EPA understand the history of the Company's involvement before, during and after EPA's inspection of RFAAP in 2011. On May 12, 2011, Alliant Techsystems was notified by the Army that it was not the successful bidder for the contract to operate RFAAP beyond June 30, 2012. Also on May 12, 2011, EPA notified the Army of the Agency's intent to inspect RFAAP on May 16-20, 2011. Alliant Techsystems participated during EPA's inspection and responded to EPA's requests for additional information during the inspection and afterward. On March 1, 2012, the transition period from Alliant Techsystems to RFAAP's new operating contractor, BAE Systems Ordnance Systems Inc., began. On June 30, 2012, the transition period ended. Alliant Techsystems ceased operating RFAAP and was no longer responsible for environmental compliance. On October 4, 2012, the Army received (and shared with Alliant Techsystems) a draft inspection report from EPA with a request for additional information by October 10, 2012. Alliant Techsystems cooperated with the Army to provide a marked-up copy of the draft inspection report text to EPA, but the final inspection report issued by EPA contains none of the changes/corrections in that markup of the draft inspection report. From October 2012 to January 2013, the Army worked with EPA to redact the inspection report to create a copy suitable for release to the public. On December 19, 2014, Alliant Techsystems received through the Army a request from EPA for a point of contact

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for the Company. On January 26, 2015, Alliant received through the Army a copy of EPA's invitation to settlement letter.

It is important to realize that Alliant Techsystems was no longer responsible for environmental compliance at RFAAP when EPA issued the first draft of its inspection report in October 2012, so the Company had no ability to review EPA's observations and concerns and implement any necessary corrective actions. Moreover, EPA sent its invitation to settlement letter to Alliant Techsystems more than 3½ years after the site inspection took place and more than 2½ years after the Company ceased to be responsible for environmental compliance at RFAAP. In the intervening years and months, key environmental personnel with essential institutional memory of EPA's site inspection and Alliant Techsystems' participation and responses afterward have left the Company, severely hampering the ability of the Company to respond to EPA's factual and legal allegations. Nevertheless, Alliant Techsystems intends to cooperate with EPA to the maximum extent possible to respond to EPA's concerns.

EPA states in its invitation to settlement letter that the Agency's highest priority is "[a]ssurance that the Facility is currently in compliance." Alliant Techsystems ceased its operational control over RFAAP at midnight on June 30, 2012, at which time BAE Systems Ordnance Systems Inc. assumed operational control of RFAAP under contract to the Army. Thus, as to EPA's primary concern – RFAAP's current compliance – the Agency must address that concern to the Army. Alliant Techsystems has no control or authority over RFAAP and, therefore, cannot address EPA's concern over current compliance at RFAAP or EPA's Areas of Concern pertaining to current compliance at RFAAP. Nevertheless, to the extent any of EPA's Areas of Concern are relevant to Alliant Techsystems' past operation of RFAAP prior to July 1, 2012, the Company will respond to those Areas of Concern.

EPA also noted in its letter that a second step in settlement negotiations will entail negotiation of an appropriate penalty for any environmental violations at RFAAP. Alliant Techsystems intends to address the issue of any appropriate penalty in this letter and subsequent discussions with EPA. However, the Company wants to stress again that as to any issues concerning penalty amounts EPA seeks as a consequence of current or continued noncompliance at RFAAP after July 1, 2012, EPA should look to resolve those issues with the Army. Alliant Techsystems is not responsible for penalty amounts accruing due to current or continued noncompliance at RFAAP after July 1, 2012.

Alliant Techsystems understands that the alleged violations and Areas of Concern summarized in the attachment to EPA's letter are based on inspections conducted at RFAAP during May 2011 and February 2014 and documented in inspection reports issued subsequently by EPA. EPA's 2011 inspection report includes various attached documents and photographs EPA took during that site inspection. Alliant Techsystems is not aware of any other documentation upon which EPA relies as the basis for its allegations of noncompliance or Areas of Concern arising prior to July 1, 2012. EPA has asked Alliant Techsystems and the Army to provide any additional information that may be relevant to discussing settlement. In the

remainder of this letter, Alliant Techsystems provides information the Company has that may be relevant to the issue of any appropriate penalty for environmental violations that occurred at RFAAP prior to July 1, 2012. We first discuss the violations alleged in the enclosure to EPA's letter and then provide information regarding EPA's Areas of Concern relevant to the Company's operation of RFAAP prior to July 1, 2012.

I. Alleged Violations

A. Hazardous waste management – RCRA Subtitle C

1. Satellite accumulation areas – 40 CFR 262.34(c)(1)

a. **EPA:** *In the Building 9468, two 3-gallon buckets containing waste "slum" samples (generally speaking, a combination of nitroglycerin, triacetin, acetone, and filter paper) were not marked with the words "hazardous waste."*

Response: The two containers at issue were at a satellite accumulation area and, therefore, were not required to be labeled as "Hazardous Waste." Satellite accumulation containers may also be marked "with other words that identify the contents of the containers." 40 CFR 262.34(c)(1)(ii). Normal practice for these containers is to apply a green tag identifying each container as a "Satellite Accumulation of Waste Propellant and/or Explosive." See photograph RCRA-C-30 for an example of such a tag. However, in this instance the operator failed to apply the tag as required. Five of the Bldg. 9468 operators received hazardous waste management training before the end of July 2011, and another eight operators received similar training before the end of December 2011. This training included reemphasizing the importance of properly labeling satellite accumulation containers.

b. **EPA:** *In Building 9304, waste was transferred from two unlabeled 20-gallon tubs to "waste tubs" labeled "Hazardous Waste" located in the adjacent room. These "waste tubs" are not located at or near the point of generation.*

Response: The two containers at issue were located in a bay adjoining the bay where the wastes were generated. While EPA refers to an adjacent "room," please note that the two bays at issue are not distinct "rooms" separated from each other by any barrier, *e.g.*, a door, that could impede ready access between the bays. These two bays are located together within a few feet of each other and are readily accessible, one from the other, without exiting the building. Webster's New World Collegiate Dictionary (4th ed. 2002) defines "near" as "close in distance or time; not far" and "at a relatively short distance from in space, time, degree, *etc.*; close to." Thus, these two containers which were close in distance (a few feet) and travel time (a few seconds) to the point of waste generation were

"near" the point of generation of the waste they contained as required by 40 CFR 262.34(c)(1).

c. **EPA:** *In Building 3524, there was a 20-gallon drum containing floor sweeps which was not closed at the time of the EPA Inspection and waste was not being added or removed from the container at the time.*

Response: Upon realizing this container was not properly closed at the time, the operator immediately closed it. Bldg. 3524 operators received refresher training regarding the importance of closing hazardous waste containers when not in use on September 23, 2011, and again during annual training on January 15, 2012.

d. **EPA:** *In Building 3524, there was a 20-gallon drum containing floor sweepings from spilled material containing 2-nitrodiphenylamine which was not at or near the point of waste generation. In addition, the drum was not properly closed. Moreover, there were other drums within Building 3524, which were not properly closed, including a 20-gallon fiber drum located in Bay #1 and two 20-gallon fiber drums containing lead located in Bay #3.*

Response: (1) drum containing floor sweeps containing 2-nitrodiphynylamine ("2-NDPA"): Alliant Techsystems believes the 2-NDPA satellite accumulation drum was "near" the point of generation. First, EPA's 2011 inspection report does not state that the drum was not near the point of generation. Furthermore, photograph RCRA-C-122 clearly shows the 2-NDPA satellite accumulation drum to be within just a few feet of the grinder room where the floor sweeps are created and collected into the drum. In this photograph you can observe the condition of the raw material drum containing 2-NDPA within the grinder room. The exterior of this drum is coated with 2-NDPA created by the grinding operations. The 2-NDPA satellite accumulation drum is not located within the grinder room for the obvious reason that such a location would render the drum unfit to use for accumulating hazardous waste. Instead, the drum is located in as close proximity to the grinding operations as possible. Upon realizing the 2-NDPA drum was not closed at the time, the operator immediately secured the lid on this drum. (2) drum in Bay #1 and two drums in Bay #3: The drums in question contained dry material and were covered with lids but the lids were not clamped tight. The lids were immediately secured. Annual hazardous waste management training for the operator in Bldg. 3524 conducted on January 15, 2012, included training to reemphasize the importance of keeping containers closed when not in use.

e. **EPA:** *In the Rocket Area, there was a 55-gallon drum containing empty aerosol cans which had been obtained from areas which were not at or near that drum.*

Response: The drum at issue, located in the Rocket Area (b) (7)(F) was a satellite accumulation drum for aerosol cans generated throughout the Rocket Area. Alliant Techsystems believes this consolidated satellite accumulation area qualifies under EPA's guidance as a location near the point of waste generation of the aerosol cans throughout the Rocket Area. EPA's guidance states:

> Based on your description of how and where these waste types are generated, it is evident that the phrase "at or near the point of generation where wastes initially accumulate" (see footnote l), requires clarification. We agree that there may be circumstances where certain hazardous wastes, which by their mode of use are generated in small amounts throughout a facility or part of a facility, could be accumulated under the reduced requirements described at §262.34(c)(1), provided that the conditions of this regulation are met. For like wastes generated from many individual locations (e.g., nickel-cadmium batteries), we would interpret the "at or near the point of generation..." language to include a specific satellite area designated by the generator that facilitates the accumulation of this material prior to moving it to a designated hazardous waste storage area. A generator should be able to define the locations of waste generation being served by a satellite accumulation area (within a generator facility or part of a facility). This is to ensure that a determination can be made as to when the 55-gallon limit has been reached for a particular satellite area.

Letter from S. Lowrance, Director, EPA's Office of Solid Waste, to D.B. Redington, Monsanto Company, February 23, 1993, page 2. (EPA document 9453.1993(01)). In RFAAP's case, the waste was similar, *i.e.*, aerosol cans, generated throughout the Rocket Area and accumulated at a specific satellite accumulation area, the (b) (7)(F) within the Rocket Area that facilitated the accumulation of those aerosol cans prior to moving them to a designated 90-day hazardous waste accumulation area. This consolidated approach, endorsed by EPA above, fits the circumstances of the Rocket Area where aerosol cans were generated and accumulated at one satellite accumulation area to avoid scattering numerous very small satellite accumulation areas throughout the Rocket Area.

f. **EPA:** *In Building 244, there was a 55-gallon drum containing waste generated from gas tank cleanouts. The drum was located outside the garage, which was not at or near the point of generation, and was not properly closed.*

Response: Alliant Techsystems believes this satellite accumulation drum was located near the point of waste generation at the (b) (7)(F). In its 2011 inspection report, EPA states: "The SAA, however, was not located at or near the

garage opening, as shown in Photograph RCRA-C-156." Alliant Techsystems disagrees with this observation. As clearly shown in photograph RCRA-C-156, the drum was located immediately adjacent to the western outside wall of the garage approximately five feet from a roll-up door that opens into the garage where the waste is generated. Thus, in terms of distance (a few feet) and time (a few seconds), this satellite accumulation drum was near the point of waste generation. (See the discussion of the definition of "near" above in the response to item I.B.1.b.)

g. **EPA:** *In Building 4912-5, two propellant shaving collection containers labeled as "Waste Explosives" were open and waste was not being added or removed at the time.*

Response: The location of the two containers at issue should be referred to as the 4924-5 dowel rod building, not Building 4912-5. EPA's 2011 inspection report (pages 19-20) notes: "At the time of the inspection, three of the propellant shaving collection containers (labeled "Waste Expolsives" [sic]) were observed; one was "in use," while the other two were not and were open (see Photograph RCRA-C-137)." Based on process knowledge and appearances in photograph RCRA-C-137, Alliant Techsystems believes that one of the open containers EPA thought to be not in use and open was actually empty and not in use at the time. The other container was draining out residual wastewater. Twenty-six of the operators were retrained on operating procedures on June 8, 2011, that included training reemphasizing the importance of keeping containers closed when not in use. The remaining fifty operators received similar training in January 2012. In addition, each operator is on a rotating schedule for annual hazardous waste management training which includes reemphasizing the importance of keeping containers closed when not in use.

h. **EPA:** *In the* (b) (7)(F) *there was a container marked with the words "hazardous waste" storing waste propellant lumps* (b) (7)(F)(b) (7)(F)(b) (7)(F) (b) (7)(F)(b) (7)(F)(b) (7)(F)(b) (7)(F)(b) (7)(F)(b) (7)(F)(b) (7)(F)(b) (7)(F) *The container was open, but no waste was being added or removed at the time.*

Response: Upon realizing this container was not properly closed at the time, the operator immediately closed it. See photograph RCRA-C-33. Thirteen of the (b) (7)(F) operators received hazardous waste management training before the end of July 2011, and another 15 operators received similar training before the end of December 2011. This training included reemphasizing the importance of keeping containers closed when not in use.

2. Universal waste lamps – 40 CFR Part 273

a. **EPA:** *In Building 450, there was an open box containing 13 waste lamps, with no means of indicating the length of time that the waste lamps had been accumulated.*

Response: Building 450 is leased to a government tenant of RFAAP, Acquisition, Logistics and Technology Enterprise Systems and Services ("ALTESS"). ALTESS, not Alliant Techsystems, was responsible for any hazardous or universal waste generation and management activities conducted within this building. EPA should look to ALTESS and the Army for resolution of any compliance concerns and demands for penalties associated with this observation during the 2011 inspection of RFAAP.

b. **EPA:** *In Building A-1034, there was an open box and open drum containing waste lamps. There were no means being utilized of demonstrating the length of time that the waste lamps had been accumulating.*

Response: (1) open box; no means of determining the length of waste lamp accumulation time: The cardboard box at issue has four flaps used to close it. The box was abutting the building wall with one of the top flaps partially open. However, no lamps were protruding from the box or even visible within the box. See photograph RCRA-C-110. Contrary to EPA's allegation, EPA's 2011 inspection report (page 17) states: "Each box displayed an accumulation start date; from left to right in Photograph RCRA-C-106, the corresponding accumulation start dates were April 24, 2011, May 17, 2011, and May 18, 2011 (see Photographs RCRA-C-107 to 109, respectively)." Accumulation start dates are visible in inspection photographs RCRA-C-107, RCRA-C-108 and RCRA-C-109. Thus, each box did have the means to determine the length of time waste lamps had been accumulated. (2) open drum: Contrary to EPA's allegation, the drum did not contain waste lamps. EPA's inspection report (page 17) states: "The drum was empty at the time of the inspection . . . ."

c. **EPA:** *In Building A-1034, there were waste lamps on the ground. There were pieces of broken glass from the waste lamps located outside the building.*

Response: Contrary to EPA's allegation, there were no waste lamps on the ground. However, broken glass was observed on the ground. EPA's 2011 inspection report (page 17) states: "There was evidence of broken lamps inside as well as outside the building (see Photographs RCRA-C-112 to 115)." Alliant Techsystems cleaned up the broken glass the same day of EPA's observation and placed it in a drum which was closed and labeled. Photo documentation was provided to the EPA inspectors that same day.

3. Land Disposal Regulations – 40 CFR Part 268

   a. **EPA:** *The Facility failed to maintain the corresponding LDR form for the Manifest No. 006748108, dated 10/26/10, in violation of 40 C.F.R. § 268.7(a)(8) which states that the generators must retain on-site copies of all notification, certifications, waste analysis data, and other document for three years.*

   Response: Manifest 006748108 pertains to a one-time, first-time shipment of dinitrotoluene ("DNT") contaminated debris to a hazardous waste TSD facility, EBV, other than the TSD facility RFAAP normally used, Heritage WTI, because of an outage of the Heritage WTI incinerator. Alliant Techsystems asked EBV for a copy of the LDR form and received it from EBV on May 20, 2011, the day after EPA reviewed the manifest. Thus, it is clear that Alliant Techsystems provided the required LDR form to the TSD, so there was no actual prospect of violating the land disposal restrictions for this waste.

   b. **EPA:** *The Facility used an incorrect waste code for dinitrotoulenes in the LDR form dated 3/10/10, in violation of 40 C.F.R. § 268.7(a)(2)(ii), which states that the generator must sent [sic] a onetime notification to each facility receiving the waste. This notice must include the EPA hazardous waste number when a generator chooses not make the determination of whether the waste must be treated.*

   EPA: Manifest 000707052MWI accompanied a shipment of waste DNT from the cleanup of a DNT processing area at RFAAP. The manifest correctly identified the waste DNT as D030 and U105. The associated LDR form had a typographical error for the waste code for DNT waste – D060 instead of D030. However, the waste code U105 for DNT was correctly recorded on both the manifest and the LDR form, so there was no actual prospect of violating the land disposal restrictions for this DNT waste.

B. Underground Storage Tanks – RCRA Subtitle I

EPA: *The Facility is alleged to have violated 9 VAC 25-580-140 (40 C.F.R. § 280.41), which requires release detection for petroleum containing USTs. The Facility did not conduct leak detection for USTs 7220-1, 7220-2, and 7220-3 for the month of December 2010.*

Response: As noted in EPA's 2011 inspection report, due to a power outage and battery backup failure of the monitoring system, there was no release detection monitoring on any of the three tanks for the month of December 2010. However, leak detection records EPA inspected for the four months following December 2010 showed that the tanks were not leaking so they posed no environmental threat.

C. Clean Air Act ("CAA")

1. Title V permit

In its letter EPA states with respect to alleged CAA Title V violations that a "comprehensive review of documentation revealed the following areas of non-compliance set forth below; the documentation gathered during the EPA Inspections forms basis for each of these allegations, but these can be discussed in further detail once the parties begin settlement negotiations." For this response Alliant Techsystems has attempted to discern the underlying documentary basis for EPA's allegations, but the Company needs to discuss many of these allegations with EPA in order to understand the basis for the allegations and to develop an accurate and cogent response. Nevertheless, to the extent possible at this time and without prejudice to future supplementation of the Company's response, Alliant Techsystems provides the following response to EPA's allegations of CAA Title V violations at RFAAP prior to July 1, 2012.

a. **EPA:** *Exceedances of the visible emissions restrictions regarding boiler stacks*

Response: The Company notes that EPA's 2011 inspection report (page 45) indicates that no visible emissions were observed from RFAAP's boiler stack during EPA's inspection. RFAAP has voluntarily operated a continuous opacity meter on this boiler stack since 2007 and has reported visible emission exceedances to the Virginia Department of Environmental Quality ("VDEQ") and EPA in RFAAP's Title V semiannual monitoring reports ("SAMRs") and Annual Compliance Certifications ("ACCs"). The Title V ACCs for 2008, 2009 and 2010 that EPA reviewed as part of its 2011 inspection of RFAAP report deviations of the opacity limits for RFAAP's powerhouse boiler stack. However, throughout this time period, Alliant Techsystems and RFAAP worked diligently in cooperation with the VDEQ to address excess opacity from RFAAP's boilers. For example, VDEQ took informal enforcement actions for excess boiler stack opacity by issuing RFAAP warning letters on March 16, 2011 (see Attachment CAA-4 to EPA's 2011 inspection report), and September 30, 2011. On behalf of RFAAP, Alliant Techsystems responded to VDEQ's March 16, 2011, warning letter as follows:

> Over the past three years, we have made substantial improvements in meeting the visible emission limits at RFAAP's coal-fired powerhouse, and we are continuing to look for opportunities to improve further. This includes the development of best work practices that help minimize excess visible emissions that occur from the operation of the facility. We have also added coal weigh feeders to be able to monitor the mass of coal fed to each boiler,

> resectionalized the ESP fields to improve collection efficiency, and added opacity meters at each boiler to be able to identify which boiler is causing an issue. We are currently working with a consultant to identify elements of the boilers that could be causing inadequate coal combustion. These efforts are designed to reduce the loading of particulate matter to the ESPs and improve the collection efficiency so that we are able to anticipate and react to change in steam load without generating excess visible emissions. As a result of this and other incidences, we are also evaluating the possibility of increasing the frequency of soot blowing to minimize particulate that is dislodged at any given time.

Letter from P. Holt, Alliant Techsystems, to F. Adams, VDEQ, April 6, 2011. See also letter from P. Holt to F. Adams, October 19, 2011, outlining significant efforts to reduce powerhouse opacity (Attachment 1 to this response). Throughout this period, Alliant Techsystems and RFAAP responded quickly to, and cooperated fully with, the VDEQ to address concerns over boiler stack opacity. Alliant Techsystems continued to address improvements in compliance with the opacity limit for RFAAP's powerhouse until the Company ceased to be the facility's operator on July 1, 2012. For example, Attachment 2 to this response is a chart showing the results of Alliant Techsystems' efforts to reduce powerhouse opacity. As this chart shows, improvements in powerhouse operations and equipment resulted in a significant improvement in opacity measurements beginning early in 2011. It is important to note that these efforts were begun before EPA notified RFAAP and conducted the site inspection in May 2011.

b. **EPA:** *Exceedances of the visible emissions restrictions regarding other equipment at the Facility*

Response: The SAMRs and ACCs for 2008, 2009, and 2010 report occurrences of excess opacity from various units at RFAAP, *e.g.*, the piccolo scrubber. VDEQ noted these exceedances in its partial and full compliance evaluations of RFAAP. See, *e.g.*, Attachment CAA-2 to EPA's 2011 inspection report. Alliant Techsystems and RFAAP worked diligently in cooperation with the VDEQ to address occurrences of excess opacity. For example, on October 31, 2010, RFAAP commissioned a new nitric acid/sulfuric acid concentrator ("NAC/SAC") facility which reduced the incidences of opacity exceedances at RFAAP. Alliant Techsystems also made operational changes at the nitrocellulose ("NC") area to reduce emissions from the piccolo scrubber during "fume off" events at the nitrators.

c. **EPA:** *Failure to maintain the tray scrubber with devices to continuously measure the scrubber liquid flow rate and the differential pressure drop across the scrubber*

Response: This allegation appears to be based on the Title V SAMR RFAAP submitted to VDEQ for the period January 1 to June 30, 2010, and VDEQ's partial compliance evaluation of September 2, 2010, based on that SAMR (Attachment CAA-2 to EPA's 2011 inspection report).

(1) With regard to the scrubber liquid flow rate, this pertains to the piccolo scrubber. The Title V requirement is not continuous measurement of the flow rate but rather that the piccolo scrubber flow rate must be observed with a frequency sufficient to ensure good performance. Title V permit condition VII.B.5. On May 27, 2010, Alliant Techsystems modified RFAAP's Standard Operating Procedure for this area to require the observation and recordation of the piccolo scrubber flow rate at least once per shift when it is operational and subsequently conducted operator training emphasizing compliance with these requirements.

(2) With regard to the tray scrubber, this pertains to the nitrogen oxide selective catalytic reduction ("NOx SCR") scrubber for which continuous measurement of scrubber differential pressure drop is required. RFAAP personnel corrected the underlying problem with the pressure drop monitor promptly upon discovering the problem on January 26, 2010.

d. **EPA:** *Failure to maintain records of all emission data and operating parameters necessary to demonstrate compliance with the permit*

Response: Alliant Techsystems is unsure of the exact nature of EPA's concern. If EPA has a specific concern regarding maintenance of records, the Company would need to discuss those specifics with EPA in order to accurately and thoroughly respond to this allegation.

e. **EPA:** *Failure to properly maintain the piccolo scrubber and associated recordkeeping*

Response: Alliant Techsystems is unable to discern the factual basis for EPA's allegation that RFAAP failed to properly maintain the piccolo scrubber. If EPA has a specific concern regarding maintenance of the piccolo scrubber, the Company would need to discuss those specifics with EPA in order to accurately and thoroughly respond to this allegation. With regard to failure to keep records associated with the operation of the piccolo scrubber, please see the response in I.C.c(1) above.

f. **EPA:** *Failure to properly calculate the hourly rolling average carbon monoxide level*

Response: This allegation appears to be based on the SAMR for January 1 through June 30, 2010, that RFAAP submitted to VDEQ on July 20, 2010. RFAAP discovered during an internal review of its MACT compliance activities conducted during the first quarter of 2010 that any uncorrected carbon monoxide ("CO") values >3000 ppmv may not have been recorded as 10,000 ppmv as required by 40 CFR 63.1209(a)(3)(i) for determining hourly rolling average CO. A RFAAP Systems Engineering project corrected this deficiency in May 2010.

g. **EPA:** *Failure to maintain minimum combustion chamber temperature for Incinerators 440 and 441*
h. **EPA:** *Failure to comply with the maximum flow rate of 50fps with respect to Incinerator 440*
i. **EPA:** *Failure to comply with the maximum afterburner combustion chamber temperature for Incinerators 440 and 441*
j. **EPA:** *Failure to comply with the maximum baghouse inlet temperature for Incinerators 440 and 441*
k. **EPA:** *Failure to comply with the minimum scrubber system liquid flow rate of 70gph for Incinerators 440 and 441*
l. **EPA:** *Failure to maintain all electronic data for Incinerators 440 and 441*

Responses: EPA's 2011 inspection report did not identify any of the foregoing issues for incinerator 440 and/or 441. It appears these allegations may be based on EPA's review of compliance records evaluated during and/or after the 2011 inspection. Alliant Techsystems is unable to discern the factual basis for EPA's allegations. The Company evaluated the two SAMRs and the ACC for 2010 and could not find any reference to the issues for incinerator 440 and/or 441 that EPA cites above. If EPA can provide additional information, Alliant Techsystems will research the available records and provide any available additional information to clarify and/or resolve the foregoing allegations. Any concerns EPA has about current compliance should be addressed to the Army.

m. **EPA:** *Failure to properly maintain all equipment in a manner consistent with good air pollution control practice of minimizing emissions.*

Response: Alliant Techsystems cannot discern the basis for EPA's allegation. There is no such blanket allegation in the Agency's 2011 inspection report. To the contrary, Alliant Techsystems maintained a state-of-the art Maximo Maintenance System for all environmentally critical equipment at RFAAP. Maximo contained Standard Maintenance Procedures for this equipment and automatically issued recurring preventive maintenance orders at the specified frequencies throughout the year. Alliant Techsystems instituted and implemented an environmental management system ("EMS") at RFAAP that was ISO 14001

certified at the time of EPA's 2011 inspection and through July 1, 2012, when the Company ceased to operate RFAAP. Thus, at all relevant times, Alliant Techsystems employed at RFAAP a recognized EMS that included a robust and reliable preventive maintenance component.

2. Ozone depleting substances – 40 CFR Part 82

EPA: *A review of the Facility's records pertaining to compliance with the 40 C.F.R. Part 82 regulations for stationary refrigeration equipment shows that in certain instances records were not kept, leak rate calculations were not performed, and initial and follow-up leak verifications were not done. The Facility's Title V permit also requires compliance with the 40 C.F.R. Part 82 regulations.*

Response: Alliant Techsystems subcontracted with licensed contractors to maintain RFAAP's refrigeration equipment in compliance with the requirements of 40 CFR Part 82. When Alliant Techsystems realized the contractors did not comply with the requirements, the Company implemented significant corrective actions. During the first half of 2011 RFAAP continued to work with its maintenance contractors for refrigeration and HVAC equipment to ensure that they complied with this permit condition. For example, on February 9, 2011, prior to EPA's inspection in May 2011, a site-wide list of all refrigeration equipment at RFAAP with a capacity of more than 50 pounds was updated. Specialized software for tracking equipment maintenance and refrigerant usage was installed and put into use. Training was provided to RFAAP's on-site refrigeration/HVAC mechanics on the Part 82 regulatory program and the use of the new software. This software was used to track leak rates, repair verifications, refrigerant inventory and various information required by this regulatory program and also used to track work performed by outside contractors. Any concerns EPA may have about compliance with the Part 82 requirements at RFAAP after July 1, 2012, should be directed to the Army.

D. CERCLA RQ release reporting – 40 CFR 302.6(a)

1. **EPA:** *For the two incidents noted below, the Facility failed to immediately notify the NRC*

   a. *According to incident report #932314, the Facility reported a release of 10 lbs. of nitroglycerin that occurred at 15:00 on 2/25/10 to the NRC at 16:22 on 2/25/10*

   Response: There was no release of a reportable quantity ("RQ") as originally reported to the National Response Center ("NRC") by RFAAP on February 25, 2010. While an initial, tentative report of an RQ release was made to the NRC that day, subsequent analytical results and calculations determined that only 1.8

pounds of nitroglycerin, well below the 10 pound RQ, was actually released. Therefore, the report made to the NRC was amended to reflect that no RQ had been released. See Attachment 3 to this response.

b. *According to incident report #99612, the Facility reported a release of diethyl ether that occurred at 5:00 on 11/22/11 to the NRC at 10:35 on 11/22/11*

Response: During the 12-8 AM shift on November 22, 2011, contractors monitoring the commissioning of RFAAP's new Solvent Recovery equipment noted an increase in the concentration of ether and ethanol from the unit's exhaust stack. Following review of operational data trends, steaming of the beds was manually initiated to remove the ether from the activated carbon. Operational trend data showed that steam had not flowed into the carbon beds since approximately 4:00 PM the prior day, indicating the process was not operating as intended. The activated carbon is used to remove ether from the air stream and, once carbon has absorbed ether, it must be regenerated by heating the bed with steam to recover the ether. If this process is not performed, the air continues to flow through the carbon, but the bed cannot absorb additional ether and the air is released without treatment. During the period in which the steam process did not occur as designed, the amount of ether release to atmosphere exceeded both the permit limit and the reportable quantity for ether (RQ=100 pounds). The NRC, DEQ, and the local sheriff's office were notified of a potential RQ release.

RFAAP had filed an RQ continuous release notification for ether emissions from this federally permitted emissions unit. The release at issue resulted from a malfunction of a federally permitted unit. An extremely complicated analysis was required to determine how much ether may have been emitted during the malfunction event. The NRC was notified immediately after the Company completed this analysis and determined that a release of an RQ likely occurred, *i.e.*, "as soon as [it] had knowledge of any [RQ] release."

EPA guidance on reporting RQ releases states:

> Nevertheless, we realize that there are a wide variety of approaches to dealing with accidents and malfunctions in CAA regulations, permits and SIPs. Accordingly, there may be unusual circumstances in which a release of a hazardous substance or EHS that resulted from an accident or malfunction might qualify for the federally permitted release exemption in section 101(10)(H) of CERCLA. Regardless, EPA strongly encourages the prompt reporting of any release associated with an accident or malfunction. In addition, remember that under many provisions in the CAA, in order for a release to qualify as an accident or malfunction it must not be preventable. Releases that were preventable may violate the general duty clause of the CAA.

67 *Fed. Reg.* 18,903 (Apr. 17, 2002). Alliant Techsystems believes that under the circumstances, it made a timely report of the RQ release to the NRC. First, the emissions came from a federally permitted unit. Thus, an RQ report would not normally be required for ether emissions from this unit. The emissions at issue resulted from a malfunction, *i.e.*, an unusual occurrence, so until the abnormal emissions could be estimated, the Company did not know whether the emissions exceeded the federally permitted limit and, if so, whether the amount emitted during the malfunction exceeded the RQ. The Company made the emissions estimate as quickly as possible given the complexity of the situation and then immediately reported to the NRC (and others) when it became known that an RQ was released.

II. Areas of Concern

A. Hazardous waste management – RCRA Subtitle C

1. **EPA:** *EPA is concerned that there may be additional areas of the Facility, currently not covered by the existing TSD permit, which should [be] permitted because waste is being accumulated for a time period greater than that allowed for generators or because waste is being treated:*

a. *In the Scrap Burn Area, the Facility may have stored demolition debris from the* (b) (7)(F)(b) (7)(F)(b) (7)(F)(b) (7)(F) *for greater than ninety days*

Response: RFAAP did accumulate demolition debris for more than 90-days in this area. However, Alliant Techsystems made a determination, as required by 40 CFR 262.11, that the debris was not hazardous waste. VDEQ concurred. See the email correspondence between Alliant Techsystems and VDEQ, Attachments 4a and 4b to this response.

b. *EPA is concerned that the Facility is using a decontamination oven (Building 4903) for treatment of hazardous waste even though it is not currently covered by the TSD permit*

Response: Alliant Techsystems used the decontamination oven to decontaminate process equipment, *e.g.*, valves, prior to regular maintenance work on the equipment. Incidental amounts of energetic materials on such equipment had to be removed for obvious safety reasons before maintenance personnel worked on it. This equipment was not solid waste. It was in no sense of the word "discarded." In addition, scrap metal was similarly decontaminated prior to off-site recycling. This scrap metal was also not a solid waste. See the exclusion from the definition of "solid waste" in 40 CFR 264.1(a)(13) ("processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal being

recycled"). As to current practice at RFAAP, EPA should address any concerns to the Army.

c. *EPA is concerned that in the* (b) (7)(F)(b) (7)(F) *the Facility stored lead containing scrap for greater than one year*

Response: EPA's 2011 inspection report (page 21) states:

> Lead metal sheets and scrap was observed being accumulated outside and inside this building (see Photographs RCRA-C-157 to 160). The lead is re-used for lining floors and trenches in the acid processing areas of the Facility. Some of the lead has been accumulated for one to two years. According to the Facility personnel present at the time of the inspection, the last time lead was re-used in a project was about three months ago.

First, as to the lead metal sheets, they may have been stored at RFAAP for periods exceeding one year before use. However, the lead metal sheets were not waste. They were not "discarded" in any sense of the word. These lead sheets were used to repair lead floors on plant. They were no different than any other equipment, process components, ingredients, *etc.*, stored at a manufacturing facility for the eventual purpose of facilitating the manufacturing process. The lead sheets were not wastes and there was no time limit for how long they could be stored prior to use.

Regarding the "lead containing scrap," Alliant Techsystems has reviewed its out-briefing meeting minutes from May 20, 2011, and found no reference to the lead shop by EPA's waste inspection team. The the only mention of the lead shop was by EPA's water inspection team in reference to lead stored outside. Thus, this RCRA Area of Concern was not communicated to RFAAP until the draft report in October 2012, after Alliant Techsystems ceased to be responsible for environmental compliance at RFAAP. However, Alliant Techsystems has contacted the former maintenance shop manager at the time of the 2011 inspection and his recollection is that the lead scrap was re-melted to make lead hammers and lead bearings for use at RFAAP. Therefore, Alliant Techsystems believes that this "lead containing scrap," was scrap metal excluded from the definition of "solid waste" per 40 CFR 261.4(a)(13). (See response II.A.1.b above.) Since this scrap metal was not a solid waste, there was no restriction on the length of time it could be stored prior to recycling.

d. *EPA is concerned that the hill tank used to store wastewater generated by the* (b) (7)(F) *has never been emptied or cleaned out*

Response: This concern was not included in EPA's 2011 inspection report and Alliant Techsystems cannot discern the basis for this concern. However, this appears to be a concern EPA has regarding the current status of the hill tank, which should be addressed to the Army

2. **EPA:** *EPA is concerned with the roof and supporting structure of Building 440, which houses an incinerator. EPA was informed that the wooden roof and supporting structure for Building 441 which also houses an incinerator burned down. Building 440 still has a wooden roof and supporting structure for its incinerator and EPA is concerned whether the Facility has complied with 40 C.F.R. § 264.31 which states that facilities must be designed, constructed, maintained, and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, and surface water which could threaten human health and the environment.*

   Response: Building 440 is has been in place since the incinerator was built in the 1970's. Building 440 is an open-sided stormwater management structure comprising wooden poles, trusses and a metal (not wooden) roof. Building 441 was a similar structure as built. Building 441 experienced two fire events. After the first event, caused by a fire in the stack protruding through the roof, the fiberglass stacks on both units (440 and 441) were replaced with stainless steel stacks. After the second event, caused by a fire originating in the pump house, the wooden pump houses for both units (440 and 441) were replaced with metal enclosures and smoke detectors were installed in both pump houses. In addition, the wooden poles and trusses in Bldg. 441 that burned were replaced with metal components. The installation of the new stainless steel stack and replacement of the wooden pump house with a metal pump house were successful in preventing a fire at Building 440 during the time Alliant Techsystems operated RFAAP. Any concerns EPA may have about the current status of Building 440 should be addressed to the Army.

3. **EPA:** *Part III.1. B.3. of the Facility's TSD permit (Permit No. VA1210020730) states that the integrity of tank and process area containment systems shall be maintained. According to the permit, cracks, gaps, loss of integrity, deterioration, corrosion, or erosion of pads, berms, curbs, sumps, construction joints, and coatings of the tank system area shall be repaired. Nevertheless, at the time of the first EPA Inspection the concrete pad within* (b) (7)(F)(b) (7)(F)(b) (7)(F)(b) (7)(F) *showed signs of deterioration.*

   Response: Although it is difficult to tell from EPA's photographs, it appears this concern originates from EPA's observation of the coating applied to the concrete floor in Building 442. The basement floor of Building 442 is coated with a conductive material for safety reasons to eliminate static sparking. This conductive coating material is not applied as a secondary containment material. Secondary

containment is maintained by the integrity of the underlying concrete pad. Deterioration of the conductive coating on the floor is not indicative of any problem with the integrity of the underlying concrete pad. An inspection of the integrity of the secondary containment in this area is conducted daily and recorded on form DUP-6057-C-365, the same form used for the daily tank inspection.

4. **EPA:** *In the* (b) (7)(F)(b) (7)(F)(b) (7)(F)*, there were ash collection containers and baghouse ash containers with a capacity to contain greater than 55 gallons of hazardous waste. EPA is concerned that the use of these containers may lead to storage of greater than 55 gallons of hazardous waste at a satellite accumulation area.*

   Response: For safety reasons these satellite accumulation area containers are larger than 55 gallons. However, Alliant Techsystems instituted administrative controls to prevent the accumulation of more than 55 gallons of waste. Two incinerator Standard Operating Procedures ("SOPs"), "RD-0000-K-002 Op 33 operating ash gate" and "RD-0000-K-002 Op 28 sampling," instruct the operator to ensure that no more than 55 gallons of waste material is ever accumulated at any time. Any concerns EPA may have regarding the current practices in the Hazardous Incinerator Complex should be addressed to the Army.

B. Underground Storage Tanks – RCRA Subtitle I

EPA: *EPA is concerned with respect to the Facility's compliance with 9 VAC 25-580-190 (40 C.F.R. § 280.50) which requires an owner and/or operator to report to the implementing agency if the monitoring results indicate a release. According to the monitoring results in September 2010, UST 7220-3 indicated a leak rate of greater 0.2 gallons/hour and there is no evidence that the Facility reported this to the VADEQ.*

Response: Whereas this AOC pertains to UST 7220-3, EPA's 2011 inspection report (page 27) states: "The Facility also did not have a passing 0.2 gph test on gasoline tank 7220-2 for the month of September 2010 (see Attachment RCRA-I-2)." We believe this statement in EPA's 2011 inspection report was in error. A review of Company records revealed a communication from the operator in charge of the underground fuel storage tanks at Building 7220 stating the following on September 16, 2010: "With the weather cooling off, the brine alarms have been activated on all three storage tanks. This is a season event and is well documented in our history here. The ground has cooled enough from our unusually hot summer to the current fall temperatures that the floats/sensors will be adjusted Monday to compensate." Thus, the brine alarm used as the leak monitoring device on UST 7220-3 did not accurately reflect the leak status of the tank at that time and the device was recalibrated promptly. The leak testing the following month of October 2010 showed a leak rate below 0.2 gallons/hour.

40 CFR 280.50(c) states, in relevant part, that reporting is required for: "Monitoring results from a release detection method required under §280.41 and §280.42 that indicate a release may have occurred unless: (1) The monitoring device is found to be defective, and is immediately repaired, recalibrated or replaced, and additional monitoring does not confirm the initial result . . . ." This is the situation encountered for UST 7220-3 in September 2010. The leak detection device was inaccurate and was recalibrated and the subsequent leak test showed no leak.

C. Spill Prevention, Control, and Countermeasures ("SPCC") Plan – 40 CFR Part 112, Subpart A

EPA: *At the time of the first EPA Inspection, it appeared that there were several areas of the SPCC Plan which needed updating. EPA is aware that in 2013 the Facility updated its SPCC Plan; however, that was done by current contractor. EPA therefore requests that the Facility indicate whether there were any updates to the SPCC Plan prior to the 2013 revision.*

Response: Alliant Techsystems began updating RFAAP's SPCC Plan in April 2011. The updated Plan was certified by a licensed professional engineer on October 1, 2011. See Attachment 5 to this response.

D. Clean Water Act – VPDES Discharge Permit VA0000248

Stormwater Discharge

1. **EPA:** *Permit No. VA0000248 Part I states that the plan should include measures that confines [sic] the actual or potential fluid leaks in the vehicle and equipment storage areas. However, at the time of the first EPA Inspection there were oily pools of stormwater located at the heavy equipment storage lot.*

   Response: Alliant Techsystems is unable to locate in RFAAP's VPDES permit the statement that "the plan should include measures that confines [sic] the actual or potential fluid leaks in the vehicle and storage areas." While operating RFAAP, Alliant Techsystems took reasonable measures to minimize oil contaminated stormwater runoff from the heavy equipment storage lot. Alliant Techsystems does not believe the "oily pools" EPA observed in the heavy equipment storage lot caused any violations of the stormwater discharge provisions in RFAAP's VPDES discharge permit while the Company operated RFAAP.

2. **EPA:** *Permit No. VA0000248 states that the facility shall implement measures to prevent or minimize contamination of surface runoff from oil*

bearing equipment in switch yard. However, at the time of the EPA Inspection there were stains in the ground in the vicinity of four transformers.

Response: While operating RFAAP, Alliant Techsystems took reasonable measures to minimize oil contaminated stormwater runoff from oil bearing equipment in the switch yard. This area and the electrical transformers stored there are addressed in the SPCC Plan the Company prepared for RFAAP. Alliant Techsystems does not believe the stains on the ground observed in the vicinity of four transformers in the switch yard caused any violations of the stormwater discharge provisions in RFAAP's VPDES discharge permit while the Company operated RFAAP. Alliant Techsystems conducted extensive stormwater discharge monitoring and never experienced a violation of the permit's limits for the stormwater discharge that could conceivably be caused by the transformers in the switch yard.

3. **EPA:** *Permit No. VA0000248 states that the facility is to implement measures to reduce pollutants in storm water discharges from industrial materials and activities that are exposed to storm water.*

   a. *At the time of the first EPA Inspection there was coal sediment outside the coal pile storage pads. The sediment was observed near Outfall #004.*

      Response: The coal sediment outside the coal pile storage pad observed by EPA was not really "near" Outfall #004. Outfall #004 is more than 1000 feet from the location of the coal sediment observed by EPA during the 2011 site inspection. Moreover, while operating RFAAP, Alliant Techsystems took reasonable measures to minimize coal sediment occurring outside the coal storage pads. Alliant Techsystems does not believe the coal sediment observed outside the coal storage pads caused any violations of the stormwater discharge provisions in RFAAP's VPDES discharge permit while the Company operated RFAAP. Nevertheless, in recognition of EPA's concern, on May 20, 2011, the coal sediment outside the coal pile storage pad was removed. See the photograph included as Attachment 6 to this response. Any concerns EPA may have with the current practices at the coal pile storage pad should be addressed to the Army.

   b. *At the time of the first EPA Inspection lead was being stored outside the* (b) (7)(F)*, the demolition; water coolers, refrigeration, and window units stored outside in the Hazard test area. In addition, there was debris from* (b) (7)(F)(b) (7)(F)(b) (7)(F)(b) (7)(F) *in the scrap burn area and scrap and metal parts near the decontamination oven.*

Response: Alliant Techsystems does not believe any of the materials mentioned by EPA caused a violation of the stormwater discharge provisions of RFAAP's VPDES discharge permit while the Company operated RFAAP.

Sanitary Sewage Treatment Plant

4. **EPA:** *Permit No. VA0000248, Part II, Section Q, states that the facility at all times must properly operate and maintain all facilities and systems of treatment and control which are installed or used by the facility to achieve compliance with the conditions of this permit. However, during the first EPA Inspection there was information that during rain events acidic wastewater would enter the sanitary sewer collection system because both the sanitary lines and the acid waste water lines were cracked.*

   Response: During the time Alliant Techsystems operated RFAAP, the facility's Sanitary Sewage Treatment Plant had the capacity and capability to properly treat low pH wastewater prior to discharge. Thus, this treatment system was fully capable of meeting the pH limit for discharge of wastewater as specified in RFAAP's VPDES permit. However, Alliant Techsystems was aware of the infiltration issue and implemented several projects over the years in an attempt to stem this infiltration. Any concerns EPA may have about the current extent of infiltration into the sanitary sewer system should be addressed to the Army.

E. CAA Risk Management Plan ("RMP") – 40 CFR Part 68

EPA: *EPA reviewed the Facility's Semi-Annual Monitoring Report, including Plant-wide Summary of Deviations and VADEQ form Failure to Monitor, Keep Records or Report, for the period January 1 through June 30, 2010. This document indicated that a compliance audit had been conducted with respect to the requirements of 40 C.F.R. Part 68 and found that various records referenced by or incorporated in the Facility's Risk Management Plan were outdated or not specific enough, which could lead to non-compliance with the following provisions of the 40 C.F.R. Part 68 requirements: 68.65, 68.67, 68.69, 68.71, 68.73, 68.79, 68.81, 68.83, 68.87. EPA would like to discuss with the Facility, the current state of the RMP and whether documents have been maintained up to date.*

Response: As a result of Alliant Techsystems internal audit of RFAAP's environmental compliance in the second quarter of 2010, the Company discovered that portions of RFAAP's RMP were deficient by the standards of 40 CFR Part 68. The Company promptly revised and submitted RFAAP's RMP to EPA and its receipt was certified by the Agency on October 19, 2010.

III. Conclusion

Alliant Techsystems appreciates the opportunity to respond to the alleged violations and Areas of Concern in EPA's invitation to settlement letter. Representatives of Alliant Techsystems and I would like to meet with you and your colleagues at EPA to discuss a mutually agreeable settlement of this matter. Please give me a call when you can propose some possible dates for such a meeting. In the meantime, if you have any immediate questions, please do not hesitate to give me a call.

Cordially yours,

Thomas E. Knauer
Counsel to Alliant Techsystems Operations LLC

Attachments

cc: Mr. Michael Miano, Alliant Techsystems Operations LLC